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ABSTRACT

This paper summarizes a study of professional development in Indiana and six other states and its connection to the provision of teacher time. The study examined state provisions for professional development in Florida, Georgia, Illinois, Indiana, Kentucky, Michigan, Ohio, and Washington. The states used different approaches to providing teacher time for professional development in their definitions of the school year, linkage to state reform goals, governance level, and funding. Experts agree that effective professional development must go beyond skills training to organizational development. An effective professional-development program is school-based and collaborative; uses coaching and other followup procedures; is embedded in the daily lives of teachers; and focuses on student learning and is evaluated in part on that basis. Such a program also requires the following conditions: advocacy-oriented leadership, resource and policy support, norms of collegiality and experimentation, and adequate time. Ten state-policy guidelines for making time available for professional development are outlined. Options for establishing a state system of teacher time for professional development are also described. It is recommended that Indiana educational policy: (1) provide state support in the form of person-days per full-time-equivalent (FTE) teacher; (2) make at least four person-days available per teacher; (3) allocate teacher time directly to the school; (4) require schools to develop a written 5-year strategic plan; (5) submit annual fiscal and performance reports; (6) provide state startup assistance to schools and a state infrastructure of policies and resources; and (7) provide state and local funding to individual schools. (LMI)

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Time for Professional Development: Ideas for Indiana

by
Barry Bull and
Mark Buechler

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EA 026 679

The Indiana Education Policy Center School of Education Office recently completed an in-depth study of professional development for the Indiana Department of Education. This policy bulletin summarizes the 94-page report that was delivered to the Department.

Five years ago, President Bush and the nation's governors formulated a set of six education goals for America that addressed (1) preschool education, (2) the high school graduation rate, (3) math and science achievement, (4) student competency in other core subjects, (5) adult literacy, and (6) student discipline. When President Clinton signed the Goals 2000 Act into law in 1994, two new goals had been added. One focused on parental involvement. The other addressed professional development for teachers:

> By the year 2000, the Nation's teaching force will have access to programs for the continued improvement of their professional skills . . . needed to instruct and prepare all American students for the next century. (Goals 2000: Educate America Act §102, 1994)

This addition to the national goals reflected a growing consensus among educators, researchers, and policymakers that it is futile to call for profound changes in America's schools without giving practicing teachers the opportunities for professional growth they need to bring those changes about.

Unfortunately, the form that professional development for teachers has most often taken—occasional workshops conducted by outside consultants with little or no follow-up—is widely regarded as ineffective. It is unlikely that this kind of training will serve as the lever that helps transform education in America. As Richard Wallace and his colleagues have written, "We need staff development that is dramatically different, not just in content, but in form of delivery and level of commitment" (Wallace, LeMahieu, & Bickel, 1990, p. 185).

What might effective professional development for 21st-century schooling look like? How can schools make time available for professional development when teachers are also being called upon to increase student contact hours?

To help answer these questions for the state of Indiana, the Indiana Education Policy Center School of Education Office, under contract with the Indiana Department of Education (IDOE), conducted a study of professional development and its connection to teacher time. Our charge was to report state-level policies on professional development in Indiana and other states, distill a set of principles for effective professional development from the research literature, generate a set of guidelines for state policy, and present and analyze policy options for making teacher time available for professional development in Indiana.

Current Professional Development Practices

Opportunities for professional development are in no short supply around the country. Federal dollars fund many programs; state departments of education offer a

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variety of workshops to schools on mandates and innovations; school districts have access to an array of professional development programs offered by an army of consultants; there are professional development schools, teacher centers, programs provided by professional organizations, and so forth.

An idea of the organization, cost, and benefits of professional development on the state and local level emerges from a large-scale study of professional development in California (Little et al., 1987). Among their conclusions:

- Professional development for teachers and administrators (excluding graduate courses) consumes about 1.8% of the state's education funds.
- For every dollar spent on professional development, teachers contribute 60 cents in uncompensated time.
- Most professional development activities are designed and administered by district personnel.
- Professional development resources are used in ways that generally reinforce traditional teaching methods and school structures.
- Rarely is professional development evaluated in terms of its effects on teachers or students.
- California lacks a comprehensive or consistent policy for professional development.

There were some other findings as well, but on the whole, Little and her colleagues describe a situation in which a good deal of money and effort was being expended on professional development, with little evidence of significant changes in student learning, teachers' behavior, or school organization.

It was beyond the scope of our study to investigate local professional development activities in such detail. We did, however, report local contract provisions for professional development days in Indiana. The average Indiana school corporation provides 0.99 professional development days per year (defined as inservice and/or Indiana State Teachers Association days), with a range from zero to five days. The average corporation also provides an additional 0.95 days for orientation (Indiana School Boards Association, 1994).

Otherwise, we focused on state-level professional development policies and programs (excluding certification and licensing requirements) in Indiana and seven other states: the four bordering states (Illinois, Kentucky, Michigan, and Ohio) and three other states with a national reputation for professional development policy (Florida, Georgia, and Washington).

State-Level Professional Development Policies

The states we studied take three different approaches to providing teacher time for professional development in their definitions of the school year. As the table below indicates, three states—Indiana, Michigan, and Washington—make no provision for teacher professional development time in the state-defined school year. (Both Michigan and Washington, however, do provide additional funds to be used for professional development.) Two states—Illinois and Ohio—allow school districts to use a certain number of mandated school days for professional development instead of student instruction. A third group—Florida, Georgia, and Kentucky—include within the school year non-instructional days that may or must be used for professional development.

State professional development policies vary in other ways as well. For example:

- *Linkage:* Some states link professional development requirements and opportunities to state reform goals or to mandated school improvement plans; others make no such link.
- *Level:* Some state policies focus on individual schools, others on school

STATE PROVISIONS FOR PROFESSIONAL DEVELOPMENT

State	Minimum & Maximum Professional Development Days Provided	Funding Provided for Professional Development
Florida	5-16	Local budget share
Georgia	0-10	Local budget share
Illinois	0-4	State formula
Indiana	**0**	**None**
Kentucky	4-9	State formula
Michigan	0	State formula
Ohio	0-2	None
Washington	0-4*	State grant

* Washington schools are encouraged, but not required, to apply for grants that fund up to four professional development days beyond the minimum instructional year.

SOURCES: State statutes for each state; personal communications with officials in each state.

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districts, and others on multi-district entities. One state, Florida, routinely plans for and provides professional development directly to schools and districts.

- *Funding:* Some states provide funds for professional development by means of a formula based on the number of students served, others by mandating that a particular share of local budgets be spent on professional development, still others by operating a grant program for which schools or school districts may apply (see table on page 2).

With some sense of the range of state policies, then, we turn to the research literature on effective professional development, which can also be an important guide to policy options for Indiana.

Overview: Professional Development and School Improvement

Despite a paucity of direct evidence that links professional development to improvements in teaching and student learning, a relatively firm consensus has emerged among experts regarding the principles underlying effective professional development. One thing virtually everyone agrees on is that one-shot workshops for teachers are generally ineffective. Instead of occasional, fragmented workshops, professional development activities need to include sustained training for teachers, with opportunities for observation, practice, feedback, and coaching.

However, skills training for individual teachers, no matter how well designed, may not be enough to further the sweeping innovations that need to take place in schools, according to many experts. What is required goes beyond skills training to *organizational development*, which involves not just changes in individual teachers' abilities but also "improvements in the capacity of the organization to solve problems and renew itself" (Sparks, 1994, p. 42). This means focusing on formal school structures and processes (decision-making authority and channels of communication, for example) and, perhaps more importantly, on school culture—the norms, values, and beliefs that underlie formal operations and infuse the lives of administrators, teachers, and students with meaning. It means "introducing the notion of lifelong learning into our institutions, and making that goal a central factor in their organization, routines, and accountability structure" ("Making Staff," 1991, p. 4). Ultimately, it means transforming schools into centers of continuous learning for teachers and students alike.

Principles of Effective Professional Development

Five general principles of effective professional development emerge from this view of overall school improvement:

Effective professional development is school based.

The school is the basic unit of lasting change. It may be advisable, therefore, to shift from generic, district-level professional development initiatives to site-specific, school-based ones. That way, a school-based professional development plan can be part of an overall school improvement plan (the formulation of which can also be considered a form of professional development).

One of the advantages of this approach is that it gets teachers involved in the design and implementation of their own professional development activities. Such involvement can be essential to the success of those activities. Another advantage is that professional development initiatives can be carefully integrated with each other and with the overall school improvement plan, thus avoiding fragmentation and superficiality.

Effective professional development uses coaching and other follow-up procedures.

Single training sessions with no follow-up are ineffective. Activities that deploy sessions spaced over time have better results, particularly if those sessions include presentations of theory, demonstrations of new teaching skills, and opportunities for teachers to practice and receive feedback.

If training is to have any lasting effect on teachers' behavior in the classroom, however, follow-up procedures, especially coaching, are critical. There are two main types of coaching: (1) coaching by experts and (2) coaching by peers—where teachers have an opportunity to observe one another and provide feedback and support. (Interestingly, some evidence suggests that peer coaching may be more effective than coaching by experts.) Giving teachers structured time to discuss new concepts and experiences

PRINCIPLES OF EFFECTIVE PROFESSIONAL DEVELOPMENT

According to research and expert opinion, the most effective professional development:

- Is school based rather than district based
- Uses coaching and other follow-up procedures
- Promotes collaboration among teachers and administrators
- Is embedded in the daily lives of teachers
- Focuses on student learning and is evaluated at least in part on that basis

also can enhance the effectiveness of training.

Effective professional development is collaborative.

Most schools are organized in ways that isolate teachers from their peers. However, professional development, like school improvement in general, works best as a collaborative endeavor. Each school needs to become a *community* in which teachers routinely have opportunities to participate in decision making, observe each other, identify and solve problems together, and share ideas in an atmosphere of mutual trust and respect.

Teachers can also benefit from collaboration that extends beyond the boundaries of individual schools. For example, collegial networks such as the National Writing Project and the Coalition of Essential Schools enable groups of teachers from across the district, state, or nation to join together in studying, developing, and implementing new approaches.

Effective professional development is embedded in the daily lives of teachers, providing for continuous growth.

At present, professional development is primarily a patchwork affair: an inservice day here, an occasional workshop there. If school improvement is to succeed, this will have to change. Indeed, continuous learning opportunities will have to become part of teachers' everyday working lives and part of every school's institutional priorities. Administrators and teachers alike will have to develop an *ethos of inquiry*—constantly examining their own practice; seeking new knowledge about subject matter, instructional methods, and student development; questioning what they learn in light of their own experience; doing research; and thinking deeply about overall school improvement.

Such activities also provide a fine model for students, as they see their teachers taking risks, working together to solve problems, and learning continuously.

Effective professional development focuses on student learning and is evaluated at least in part on that basis.

Professional development should be judged primarily by its effect on students, experts say. To be sure, other benefits—an expanded repertoire of teaching skills, greater collegiality—are worthwhile in and of themselves. But unless student learning improves, professional development cannot be considered a complete success.

Schools need to become centers of continuous learning for teachers and students alike.

The best way to judge the effects of professional development is to conduct some sort of evaluation beyond the standard five-point scale questionnaire used after so many inservice sessions. The most helpful evaluations begin early in the planning process and continue after the initiative has been completed. Ideally, evaluations provide continuous feedback to teachers, track the effect of professional development on teachers and on the school improvement process, and use data to document its effect on student learning.

Conditions for Professional Development

Using professional development as a vehicle for school improvement and student learning, rather than simply as a means of improving individual teachers' knowledge or skills, is a difficult task. Without the proper setting and support, even the best professional development initiatives undertaken by the brightest and most motivated teachers may fail.

On the other hand, in a school where the principal is a strong advocate of continuous learning, where time is built into the schedule for professional development, where teachers routinely solve problems together, where innovation is encouraged, where a coherent strategy for overall school improvement prevails, and where policies and resources support change, chances are that many teachers will participate in and profit from professional development.

The following conditions are the ones most likely to influence the course of professional development initiatives:

Leadership

Capable, active leadership on the part of policymakers, administrators (especially principals), and other key actors is vital to the success of professional development initiatives. The best leaders serve as advocates, showing through word and deed that they champion the cause of continuous professional growth. They provide assistance, solve problems, and remove barriers to change. They apply pressure when necessary. And they set the tone for a vibrant school culture that supports collaboration and continuous school improvement.

Resource and Policy Support

Other forms of support in addition to leadership are important as well. One is access to resources outside the school, such as research, examples of effective practice, and the creative ideas of experts. Policy coherence at all levels is also crucial, or else schools can be inundated with competing demands. Ideally, school, district, and state improvement plans are coordinated into a seamless whole targeted at increasing student learning, and the district and state have an infrastructure of policies and resources in place that support continuous professional development.

Norms of Collegiality and Experimentation

Professional development is much more likely to be successful in schools where teachers interact frequently with

one another and with administrators, where the interactions focus on teaching and learning rather than on problem students or social lives, and where risk-taking is encouraged (see Little, 1982).

Adequate Time

Without adequate teacher time for collaboration, observation, follow-up activities, continuous study, and evaluation, the odds that any professional development initiative will benefit teachers and students are low. But how can teachers find the time to engage in this kind of continual learning when their workdays are almost completely absorbed by teaching responsibilities?

There are essentially two options for increasing professional development time. One is to add time to the school calendar (this is discussed for Indiana in the Options section below). The other is to make more effective use of time within the school calendar. Among the many suggestions for "creative scheduling" mentioned in the research literature are:

- expanded staffing (hiring rotating teachers, using substitutes);
- common planning time for teachers;
- alternative grouping and programming (bringing students together in large groups to free teachers, for example);
- banked time (scheduling a few extra minutes of instructional time per day above the required minimum, thereby accumulating enough time to dismiss students early on occasion).

Guidelines for State Policy on Teacher Time for Professional Development

In light of the principles established above, how might state policy in Indiana make teacher time available for school-oriented professional development, that is, professional development directed to the concrete needs of individual schools? The following 10 guidelines chart out a general direction for ways state policy might define the purpose, scheduling, allocation, and use of teacher time for professional development. (Specific options and suggestions are provided in the final two sections of the bulletin.)

Guideline 1. State provision of teacher time for professional development should be based upon and integrated into local plans for school improvement that teachers at the school have helped formulate.

This guideline points out a natural link between the five principles of effective professional development and Indiana's Performance-Based Accreditation (PBA) System. PBA requires teacher involvement in establishing school goals for improved student learning. In turn, these goals provide a basis for designing and evaluating professional development in the school. State provision of teacher time to participate in the design of school improvement plans and of the professional development activities that accompany those plans would not only promote effective professional development but also expand state support of the local school improvement process.

Unless teachers are given adequate time, professional development initiatives are unlikely to have much of an effect.

Guideline 2. Time for professional development that enhances school improvement should be provided on the job.

Guideline 3. The scheduling of teacher time for professional development should be flexible enough to provide opportunities before, during, and after the regular school day and school year, as local plans for school improvement necessitate.

Because the focus of professional development is the local school, it stands to reason that teachers will need time at the school to gather information, analyze problems, seek solutions, and test those solutions. Thus, teachers should be encouraged to view school-oriented professional development as an integral part of their job, and schools should be prepared to grant teachers the necessary time on the job to carry out those responsibilities. Of course, some professional development might be most effective if scheduled off site—for example, to permit teachers to observe programs in other schools. But decisions about appropriate scheduling need to be made at the school.

Guideline 4. The scheduling of teacher time for professional development should encourage participating teachers to work together to develop and carry out plans for school improvement.

Some of the critical ingredients of effective professional development—such as peer coaching, research teams, and program evaluation—require teachers to work with one another at the school site. Even when teachers work individually—for example, to conduct library research—they must have time to discuss their findings with colleagues at their school. Thus, schools must be prepared to schedule school-oriented professional development to permit teachers to work together to design, implement, and revise school improvement plans and activities.

Guideline 5. The scheduling of teacher time for professional development should maintain instructional coherence and continuity for students.

Thoughtful planning will be necessary to ensure that student learning is not unduly interrupted during school hours. After all, the basic purpose of professional development is the improvement of student learning. Principals and teachers might consider, for example, using

the funds provided for teacher time to employ regular substitutes, part-time teachers, or teachers shared with other schools—all of whom can help maintain instructional momentum for students while other teachers participate in professional development activities. Therefore, rules about the use of any professional development funds provided by the state must be flexible enough to permit such arrangements.

Guideline 6. Time for professional development should be targeted to projects and teachers where it is most needed for school improvement.

Guideline 7. The provision of time for professional development should permit sustained involvement of participating teachers.

Every teacher needs and deserves time for professional development. At the same time, however, the proposed purpose of state-supported professional development time (Guideline 1) suggests that those teachers who are willing to be deeply involved in the complex and time-consuming work of improving their schools ought to be given priority in the allocation of that time. Moreover, the research on effective professional development suggests that involvement must be sustained over a considerable time for teachers to make real changes in their teaching and their schools.

Capable, active leadership is vital to the success of professional development initiatives.

Thus, state provision of time for school-oriented professional development should not take the familiar form of doling out to all teachers the annual day of professional development to be taken at individual teachers' discretion. Instead, state policy must encourage the teachers and administrators in a school to allocate time to projects that serve the school's highest priorities for improvement and, therefore, to the teachers involved in those projects.

Guideline 8. The appropriate uses of teacher time for professional development should be defined flexibly enough to meet the requirements of school improvement plans and the various elements of effective professional development, such as planning, instruction, practice, coaching, and evaluation.

Guideline 9. Time made available for professional development should be reserved for that purpose and thus be protected from utilization for the manifold other demands made on teachers.

It is important to ensure that time for professional development is not consumed in unrelated activities (routine clerical or supervisory tasks, for example). However, defining the use of teacher time for professional development too narrowly could prove counterproductive, since the needs of local schools vary considerably. Also, research on professional development suggests that many different types of activities are necessary in improving school performance. As long as state-supported time for professional development is thoughtfully scheduled, then, the state should permit its use for the wide range of activities related to the development and execution of school improvement plans.

Guideline 10. Additional support should be provided to make the use of teacher time for professional development most effective.

Time alone is a necessary but not sufficient condition for effective professional development. There is also a crucial role for people in and outside the school to play in providing the support, information, and ideas upon which that development may depend. Therefore, a comprehensive state policy for school-oriented professional development must consider how teachers can gain access to the support needed to help them create and carry out plans for school improvement. This support could range from helping teachers work collaboratively with one another to increasing their access to recent developments in subject matter knowledge.

Options for a System of Time for Professional Development

There are numerous options for establishing and funding a state system of teacher time for professional development. Among the categories of options:

- *Allocation of time:* The state could provide time by (a) permitting some of the currently mandated 180 days of instruction to be used for professional development (effectively shortening the instructional year), (b) lengthening the school year and requiring that the added days be used for professional development, or (c) leaving the current instructional year intact and requiring that a specific number of person-days be provided for professional development each year (for example, a school with 50 teachers would be required to allocate 200 person-days to its teachers; this time could be scheduled as needed for school improvement activities).
- *Connection with PBA:* The state could (a) establish an independent program for professional development or (b) incorporate the program within PBA.
- *Locus of control:* Time for professional development could be controlled (a) by the school corporation or (b) by individual schools.
- *Source of funding:* The state could (a) provide funds to pay for teacher professional development time, (b) require school corporations to pay the costs out of their base tuition revenue, or (c) share costs with school corporations.
- *Regulation:* To regulate the use of teacher time for professional development, the state could (a) require

each school to produce a detailed plan specifying precisely how teachers would use the time or (b) permit a more general strategic plan whereby each school could demonstrate that it was satisfying the principles for effective professional development and the guidelines for state policy without providing details about the use of time.

- *Additional resources:* The state could provide additional resources beyond teacher time to schools via (a) services delivered by the IDOE, (b) a competitive grant program, or (c) restricted or unrestricted across-the-board funds to schools.

Overview of a State System of Teacher Time for Professional Development

An analysis of these options in light of the principles and guidelines discussed above suggests a general picture of the way an effective state system of teacher time for professional development might work in Indiana. Such a system would join the state, local schools, and their teachers in a coordinated effort at school improvement under the aegis of PBA. Each school in the state would have an annual reservoir of teacher time made available by state support and thoughtful, creative scheduling at the school.

State support for teacher time would come in the form of person-days per full-time equivalent (FTE) teacher for school-oriented professional development. This person-day approach encourages professional development on the job, at the school site, and, when appropriate, during school hours. Thus, it is preferable to either adding extra days to the school calendar or permitting schools to use current instructional days for professional development, both of which encourage schools to follow more traditional patterns of professional development outside the context of the school and its specific needs for improvement. (The latter option also reduces time available for student instruction.)

The review of state policies summarized above suggests that states making the greatest effort to provide teacher time typically make at least four days available to teachers (see the table on page 2). Four person-days per teacher, then, might be a target for which Indiana could aim. Given the demands of the PBA process, perhaps schools in their PBA year or on probation could receive five days and other schools three days.

State-dedicated funding would fully support the provision of person-days. Calculated as a multiple of the average daily salary of teachers in the state, the five-day/three-day plan would cost approximately $40 million per year. Fewer days would, of course, cost less.

Other components of the state's system of teacher time for professional development might include:

- allocation of teacher time directly to schools rather than to school corporations, with provisions for schools to transfer their time to other schools in special cases;
- a requirement that schools, as part of their PBA school improvement plan, develop a written five-year strategic plan for professional development time that involves teachers, focuses teacher time on projects that meet the school's highest priorities for improvement, schedules time to permit effective teamwork on those projects, maintains instructional continuity for students, provides sustained training to involved teachers, modifies projects on the basis of their effects on student learning, and explains how other resources to support the effective use of teacher time will be obtained;
- submission of brief annual fiscal and performance reports as part of the state-mandated report card, accounting for the use of state funds and the extent and purpose of professional development time utilized in each school;
- the provision of state start-up assistance (such as technical assistance in scheduling teacher time) to schools and the maintenance of a state infrastructure of policies and resources to support the effective use of teacher time;
- the provision of state as well as local funding to help individual schools obtain specific additional resources needed for staff development.

In general, teachers would use their newly acquired professional development time to participate in the school community's identification of priorities for school improvement and then to work in teams over sustained periods on specific school improvement projects to meet those priorities. While working on such projects, teachers could gather relevant research; observe at other schools that are using innovative approaches; receive instruction in subject matter, school organization, and teaching methods; experiment with new techniques; give and receive feedback on their efforts to change instruction; and conduct research on the effectiveness of their efforts in improving student learning. To enhance the work of the teams, teachers would have access to materials and individuals who could provide them with ideas and assistance relevant to the school improvement projects.

Each school in the state would have an annual reservoir of teacher time for professional development.

Finally, as projects succeed and mature and as school improvement priorities evolve, other teachers at each school would become involved in professional development. Indeed, schools committed to the linked processes of school improvement and school-oriented professional development would become centers of continuous learning for both teachers and students. ❑

References

Goals 2000: Educate America Act, Pub. L. No. 103-227, 108 Stat. 125 (1994).

Indiana School Boards Association. (1994). [1993/94 ISBA data bank: Teacher contract analysis.] Unpublished raw data.

Little, J. W. (1982). Norms of collegiality and experimentation: Workplace conditions of school success. *American Educational Research Journal, 19,* 325-340.

Little, J. W., Gerritz, W. H., Stern, D. S., Guthrie, J. W., Kirst, M. W., & Marsh, D. D. (1987). *Staff development in California* (PC87-12-15-CPEC). Berkeley/San Francisco: Policy Analysis for California Education (PACE); Far West Laboratory for Educational Research and Development.

Making staff development pay off in the classroom (Research Brief No. 4). (1991). New York: New York City Public Schools.

Sparks, D. (1994, March 16). A paradigm shift in staff development. *Education Week,* p. 42.

Wallace, R. C., LeMahieu, P. G., & Bickel, W. E. (1990). The Pittsburgh experience: Achieving commitment to comprehensive staff development. In B. Joyce (Ed.), *Changing school culture through staff development* (pp. 185-202). Alexandria, VA: Association for Supervision and Curriculum Development.

Copies of the full 94-page report,
Professional Development and Teacher Time: Principles, Guidelines, and Policy Options for Indiana,
are available from the Indiana Education Policy Center
School of Education Office for $9.00 each.

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